

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION**

UNITED STATES OF AMERICA

v.

**YANJUN XU
(a/k/a Xu Yanjun and Qu Hui)**

Case No. 1:18-CR-0043

Judge Timothy S. Black

**UNITED STATES' MOTION TO
EXCLUDE PROPOSED DEFENSE
EXPERT**

The United States respectfully moves this Court to exclude the testimony of proposed defense expert Barry Davidson, Ph.D. By disclosing this new defense expert the night before the government closed its evidence, the defendant engaged in the very trial-by-ambush tactics that the Rules of Criminal Procedure and this Court's discovery orders seek to prevent. As explained below, the proposed testimony does not rebut any trial evidence. Rather, it seeks to introduce testimony that should have been disclosed nearly a year ago.

BACKGROUND

In April 2018, a Southern District of Ohio grand jury returned a four-count indictment against Xu, charging him with conspiring and attempting to commit economic espionage and conspiring and attempting to steal trade secrets. The indictment alleges a series of overt acts committed in furtherance of the conspiracies, including a June 2017 presentation that Employee 1 gave at Nanjing University of Aeronautics and Astronautics at the invitation and direction of Xu and an unindicted coconspirator. (R. 1, indictment at 9, 14.) The government's first production of documents, provided to the defense in November 2018, included the June 2017 presentation given by Employee 1.

Through correspondence, the government made repeated requests to the defense for the reciprocal disclosure of discovery, including summaries of “any testimony that the defendant intends to use under Rules 702, 703, or 705 of the Federal Rules of Evidence.” (E.g., July 17, 2019 letter, September 27, 2019 letter, December 3, 2019 letter, March 8, 2021 letter)

On November 1, 2019, pursuant to the Court’s scheduling order, the parties exchanged notices of anticipated areas of expert testimony. (R. 97, amended trial calendar at 987.) Xu represented that he anticipated calling three experts: (1) a cultural expert; (2) an intelligence expert; and (3) a technical expert. (*Notice* at 1–2.)

On December 30, 2020, pursuant to the Court’s scheduling order, and after multiple requests for extensions by Xu, the parties exchanged expert disclosures. (R. 99, second amended trial calendar at 993.) Xu disclosed only two experts: Lily Tang Williams, a “cultural expert,” and James Alan Schnell, Ph.D., an “intelligence expert.” (*Disclosure* at 1–2.) Xu did not disclose a technical expert.

On February 5, 2021, the government moved to exclude both witnesses “due to incomplete disclosures” under Federal Rule of Criminal Procedure 16. (R. 116, motion.) In response, Xu asserted that although he “anticipate[d] calling his experts during rebuttal rather than his case-in-chief,” he nevertheless “disclosed them under Rule 16 on the remote chance that he [would call] them during his case-in-chief.” (R. 120, opposition at 1365.) Xu cited no authority for the proposition that a defendant’s discovery obligations do not extend to all expert testimony he intends to use; nor did Xu cite any authority that a defendant can apply a “rebuttal” label to an expert in order to circumvent Rule 16 disclosure obligations.¹ (*Id.*) On May 12, 2021,

¹ Xu cited *United States v. Isch*, No. CR-09-040, 2009 WL 4582540, at *1 (W.D. Okla. Dec. 1, 2009), for the proposition that “the disclosure requirements of Rule 16(b) apply to evidence intended to be used during a defendant’s case-in-chief” and, therefore, “true rebuttal evidence normally is not within the scope of the rule.” (R. 120, opposition at 1365). This is misleading.

following a status conference with the Court, the defense provided supplemental expert disclosures for Williams and Dr. Schnell.

Trial began on October 18, 2021. Over the course of several days, Special Agent Bradley Hull testified about the chronology of the investigation. During Special Agent Hull's direct examination, the June 2017 presentation was admitted into evidence. During cross-examination, Hull testified that the June 2017 presentation did **not** contain trade-secret information.

On October 28, GE engineer Nick Kray testified that GE's composite fan blade and containment system technology are key technologies and that other companies have tried, but failed, to replicate them. On direct examination, Kray was shown two exhibits² with questions that Xu had asked, or planned to ask, Employee 1. Kray testified that the questions pertained to composite fan blade and containment system technology and that answers to some questions could lead to GE proprietary information. On cross-examination, the defense asked Kray about a "building block design and testing approach," but did not ask about the 2017 presentation.

On the evening of October 28, the day before the United States completed its case-in-chief and nearly 10 months after the Court's disclosure deadline, the defense disclosed its intention to present Dr. Davidson as a "rebuttal" expert. In correspondence with the United States, the defense claimed that Dr. Davidson would be "presented in response to the testimony presented today"—*i.e.*, in response to Kray's testimony. The disclosure indicated that Dr. Davidson would testify regarding whether Employee 1 revealed GE Aviation trade secrets during his June 2017 presentation. (*Disclosure* at 1.) Specifically, Dr. Davidson would review the slides

Isch went on to explain that, "to qualify under this exception, such contemplated defense evidence must be confined to matters in in response to evidence presented during the government's rebuttal case." *Id.* at *2. That is because "Rule 16 makes clear that a defendant has a reciprocal duty to disclose certain evidence intended for use during the defendant's case-in-chief." *Id.* at *1.

prepared for the June 2017 presentation “and explain why each image is a representation of, or a step within, a standard ‘building block’ approach to designing, modeling, and testing composite materials for use in specific applications such as aircraft fan blade encasements.” (*Id.*)

In addition to addressing the June 2017 presentation – which no one has contended is trade secret – Dr. Davidson would testify to several additional topics, namely:

1. “[I]n general, GE Aviation’s carbon fiber composite fan blades and encasements cannot be reverse engineered because the material is developed through the standard building block approach which is a complex and lengthy trial and error process affected by innumerable variables.” (*Id.* at 2.)
2. Dr. Davidson would testify about Rolls-Royce’s development of their Ultrafan engine made from composite materials; and
3. Dr. Davidson would testify about “the status of China’s development of composite materials for use in jet engines.” (*Id.* at 6–7.)

ARGUMENT

Federal Rule of Criminal Procedure 16 provides for the reciprocal discovery of expert witnesses. *See United States v. Campbell*, 81 F. App’x 532, 535 (6th Cir. 2003). At the defendant’s request, the government must provide the defendant a written summary of any expert testimony that the government intends to use during its case-in-chief at trial. Fed. R. Crim P. 16(a)(1)(G). If the government complies with defendant’s request, the defendant, at the government’s request, must provide the government a written summary of *any* expert testimony that the defendant intends to use as evidence at trial. *Id.* 16(b)(1)(C). The purpose of the reciprocal disclosure obligation is “to minimize surprise that often results from unexpected

² Exhibit 69 was a list of questions Xu emailed to Employee 1; and Exhibit 6e was a list of questions found on Xu’s phone when he was arrested in Belgium.

testimony and to provide the opponent with a fair opportunity to test the merit of the expert's testimony through focused cross-examination.” *United States v. White*, 492 F.3d 380, 406 (6th Cir. 2007) (quoting Fed. R. Crim P. 16 (adv. comm. Notes)) (alterations omitted).

If a party fails to comply with its Rule 16 obligations and related court orders, a district court may (A) issue a discovery order to the non-complying party; (B) grant a continuance; (C) “prohibit the party from introducing the undisclosed evidence;” or (D) “enter any other order that is just under the circumstances.” Fed. R. Crim P. 16(d)(2). Moreover, where a defendant fails to comply with “established rules of procedure and evidence designed to assure both fairness and reliability in the ascertainment of guilt or innocence,” the exclusion of the withheld or late disclosed evidence “does not violate an accused’s right to present a defense so long as those rules are not arbitrary or disproportionate to the purposes they are designed to serve.” *Campbell*, 81 F. App’x at 535 (quoting *Chambers v. Mississippi*, 410 U.S. 284, 302 (1973) & *United States v. Scheffer*, 523 U.S. 303, 308 (1998)). Accordingly, the Sixth Circuit has repeatedly affirmed district court decisions to exclude expert testimony based on defendants’ failures to comply with their obligation to timely disclose that testimony under Rule 16(b)(1)(C). *See, e.g., id.* (holding that district court acted within its discretion to exclude expert testimony not disclosed prior to trial); *United States v. Wolford*, 656 F. App’x 59, 62–63 (6th Cir. 2016) (holding district court properly precluded expert testimony disclosed on the night following the third day of trial because defendant “never provided the Government with the information required by Rule 16, essentially denying the Government an opportunity to rebut his witness’s testimony with its own expert”); *United States v. Pittman*, 816 F.3d 419, 425 (6th Cir. 2016) (holding that district court acted within its discretion in excluding expert testimony because defendant did not comply with Rule 16(b)(1)(C) where defendant “never offered a good explanation for failing to provide

notice” and “[r]ecessing the trial to remedy the Rule 16 violation would have led to still more delay”). The justification for excluding evidence is especially strong where the untimely disclosure is part of a “tactical ambush” designed to avoid revealing expert witnesses to the opposing party. *See United States v. Lang*, 717 F. App’x 523, 537 (6th Cir. 2017); *cf. Taylor v. Illinois*, 484 U.S. 400, 414–17 (1988) (noting it is reasonable to “presume that there is something suspect about a defense witness who is not identified until after the 11th hour has passed” and holding that exclusion is warranted where omission “was willful and motivated by a desire to obtain a tactical advantage”).

Defendant’s eleventh-hour expert disclosure of Dr. Davidson—designed to maximize surprise and deprive the government of a fair opportunity to test his testimony—is a flagrant violation of both Rule 16 and this Court’s discovery orders. The Court should not tolerate this “tactical ambush.”

As a preliminary matter, Xu cannot cast his untimely expert disclosure as a timely “rebuttal expert” disclosure. While Rule 16 obligates the government to disclose only the expert testimony it intends to use “during its case-in-chief at trial,” a defendant’s obligation applies to “any testimony that the defendant intends to use under Rules 702, 703, or 705 of the Federal Rules of Evidence as evidence at trial.” Fed. R. Crim P. 16(a)(1)(G) & (b)(1)(C).

The Fourth Circuit’s decision in *United States v. Hayez*, 260 F. App’x 615 (4th Cir. 2008), is directly on point. There, the defendant claimed that he did not give notice of his intent to use an expert witness pursuant to Rule 16 “because he did not recognize that he needed the testimony until he heard testimony of his former accountant that the transactions involved were ‘diversions’ and ‘misappropriations.’” *Id.* at 619. Both the district court and the appellate court rejected the defendant’s claim that he was “caught off guard by his former accountant’s

testimony.” *Id.* Defendant “knew that the government’s case against him involved his failure to report diverted funds as income on his individual income tax returns” and it was “inconceivable that [he] could later claim that he was surprised that the government presented evidence characterizing his transactions as diversions or misappropriations.” *Id.* at 619–20. Accordingly, “the lack of notice under Rule 16(b)(1)(C) alone was sufficient to justify the district court’s ruling.” *Id.* at 620; *see also United States v. Ornelas*, 906 F.3d 1138, 1151 (9th Cir. 2018) (rejecting defendant’s argument that he did not violate Rule 16 because he “had not yet intended to call [expert] when the disclosure deadline came and went” because this argument “would render deadlines meaningless”—by requiring disclosure by date certain, “the district court required the parties to figure out before that date whom they wanted to call”).

It is difficult to identify the scope of and bases for Dr. Davidson’s proposed testimony, including what testimony he is purportedly rebutting. From what the government can glean, however, his testimony should also be excluded because it has minimal relevance and would confuse, rather than assist, the jury. *See Hayez*, 260 F. App’x at 619–20 (affirming exclusion of expert testimony based on late notice, lack of relevance, and confusion); *cf. Wolford*, 656 F. App’x at 63 & n.5 (affirming decision to exclude expert for Rule 16 violation where the testimony would have been “irrelevant” and “problematic”).

1. The Opinion regarding the June 2017 Presentation.

Xu suggests that Dr. Davidson is needed to testify about Employee 1’s 2017 slide presentation and whether it includes trade secret information. But Xu has known of the potential relevance of the 2017 slide presentation since 2018—when it was mentioned in the indictment and produced to him by the government. Accordingly, if he wanted to offer expert

testimony about the content of that presentation “as evidence at trial,” he was required to disclose the relevant information pursuant to Rule 16 and the Court’s scheduling order.³

More importantly, the government has not contended or presented evidence that the June 2017 presentation contained GE trade secrets. In fact, on cross-examination, Agent Hull conceded that GE determined that the presentation does not contain trade secrets. Consistent with Special Agent Hull’s testimony, the government is not contending that the June 2017 presentation contained any trade secrets. There is no need for purported “rebuttal” opinion on an uncontested issue that the defense has known about for three years. Therefore, any expert testimony on whether the information in the June 2017 presentation was publicly available and whether it would permit China to reverse engineer G.E. fan blade technology has little probative value and would confuse the issues.

2. The Opinion regarding the Irreversibility of GE’s Composite Fan Design.

Dr. Davidson offers a new, novel opinion regarding the irreversibility of GE’s composite fan designs. This opinion is buried within the opinion regarding the 2017 presentation. To the government’s view, this is the true opinion that the defense wants to present by ambush.

In the opinion, Dr. Davidson essentially argues that GE’s design process is so singular and complex that one could not perfectly replicate it without every data point relating to the materials, design, and manufacturing process. In short, the defense now argues for the first time that stealing files from GE’s composite program would be futile because the entire process is too difficult to replicate.

First, this opinion is irrelevant and misleading to the jury. It makes no difference if the person stealing trade secrets would ultimately be successful in replicating the product. All that

³ Indeed, Xu has not—and cannot—explain why he could not anticipate the need to call Dr. Davidson until the conclusion of the government’s case-in-chief.

matters in this case is whether the person had the intent to steal the trade secrets and whether they attempted or conspired to do so.

Second, as part of Xu's defense, he was required to disclose it along with his other expert disclosures in December 2020. Xu's nondisclosure deprived the government of the opportunity to prepare its own case-in-chief and witnesses in anticipation of the issue or opinion. Xu's belated disclosure has also deprived the government of adequate time to prepare an effective cross-examination of Dr. Davidson. Accordingly, this court should preclude Dr. Davidson from testifying. *See Lang*, 717 F. App'x at 537; *Wolford*, 656 F. App'x at 62–63.

Finally, defense counsel asked Mr. Kray testified about the “building block approach,” which is an extremely basic approach to scientific and manufacturing problems. The defense then placed those words in bold in Dr. Davidson's opinion. This appears to be a desperate attempt to make it appear that Davidson is in rebuttal to Kray's testimony. In reality, it was the defense that raised this issue on cross-examination with Mr. Kray. The defense has known all along that it wanted to surprise the government with these opinions by Dr. Davidson, so it asked about a few of these buzz words on cross-examination. As stated above, none of these opinions by Davidson are actual rebuttal evidence. Additionally, a defendant cannot manufacture a “rebuttal” argument by soliciting such information on cross-examine. Such an exception would wholly undermine the expert disclosure rules and allow defense counsel to always withhold expert opinions under this guise.

3. The Opinion regarding Rolls Royce.

Xu also discloses testimony from Dr. Davidson related to Rolls Royce's development of a competing composite product that has not yet been certified or sold on the market. The defense has cross-examined several of the government's witnesses on this issue, demonstrating that this

was one of Xu's arguments all along, rather than "rebuttal" evidence. Xu cannot justify its tactic of withholding the opinion and then disclosing the expert opinion in the latter stages of trial. Any opinion or testimony on this issue would be, at best, cumulative. At worst, this is another example of Xu withholding evidence in clear violation of the government's discovery requests and the Court's expert disclosure deadlines.

4. The Opinion regarding China's Development of Composite Materials.

Lastly, the Davidson disclosure states that he will opine regarding China's efforts to develop composite materials for use in jet engines. This is in no way responsive to the testimony of Nick Kray. Mr. Kray did not discuss or opine regarding China's own jet engine programs at all. However, the government did produce such testimony through Rizwan Ramakdawala. Mr. Ramakdawala was duly noticed by the government and his opinions were disclosed to the defense in December 2020.

Prior to Thursday, October 29, 2021, at no time did Xu or his defense team disclose an expert opinion on this topic. Xu was aware of Mr. Ramakdawala's anticipated testimony and disclosed nothing in response. Even now, the disclosure of Dr. Davidson's opinion is completely inadequate and insufficient to satisfy Rule 16. The disclosure states that Davidson will discuss the topic but says nothing about the substance of his opinion. For these reasons, the opinion related to Chinese development of composite materials should be precluded as well.

CONCLUSION

The mid-trial disclosure of Dr. Davidson by the defense illustrates the very worst in trial by ambush tactics. The defense team simply withheld this information until the last possible moment in order to maximize its strategic advantage, with no regard for the Court's orders or Rule 16. If defendants can do what Xu did here—delaying disclosure and gaining a tactical

advantage—simply by stamping a “rebuttal” label on experts they anticipate calling in their case-in-chief, Rule 16’s disclosure requirements would be rendered meaningless. The United States respectfully requests that the Court exclude the proposed testimony of Dr. Davidson.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been electronically served via electronic mail upon defense counsel, this 31st day of October, 2021.

s/Timothy S. Mangan
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